NEW JAPANESE FUNGI

NOTES AND TRANSLATIONS—V

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PHYSALOSPORA MINUTA I. Miyake sp. nov. in Sangyô Shikenjô Hôkoku (Technical Report of the Imperial Sericultural Experiment Station), Tôkyô, Japan. 1^5: 314, pl. 16, figs. 1–3, T. 5, xii, Dec. 1916. (Japanese.)

Perithecia sunk in the matrix, with ostiola erumpent, ellipsoid or globoid, 150–200 μ in diam. and nearly 125 μ in height; perithecial wall black, pseudo-parenchymatous; ostiola 45–50 μ long, about 40 μ across; asci clavate-cylindric, thick-walled above, 60–70 $\times$ 13–18 μ, paraphysate, octosporous; paraphyses filiform, abundant, forming thick periphysatic tissue; ascospores subbiseriate, fusoid or ellipsoid, obtuse, minutely granulate, 18–22 $\times$ 8–9 μ.

On living twigs of *Morus alba*.

Type localities: Gifu-ken, Kaidzu-gun, Shiroyama-mura, Mar. 1909, I. Miyake; Fukui-ken, Mar. 1909, K. Hara; Kyôto-fu, Ayabe-chô, Apr. 26, 1915, I. Miyake.

Illustrations: Three lithographic figures showing detailed structure of the fungus.

Mostly appears in presence of *Macrophoma minuta* Berl. the pycnidia of which are surrounded by blackened hyphae commonly known as subiculum, which occur simultaneously with the formation of perithecia of the present species. Symptoms of the two are identical, shown by minute, gregarious, elevated spots covering certain areas of the twigs. As to the evidence of genetic relationship between the two, since no ascogenous form of the former species has been reported, the new name is given as above.

ASCOCHYTA MORI I. Miyake sp. nov. in Sangyô Shikenjô Hôkoku (Imperial Sericultural Experiment Station, Technical Report), 1^5: 345, Pl. 17, figs. 17–18, T. 5, xii, Dec. 1916. (Japanese.)

Pycnidia ellipsoid or conoid, immersed, later erumpent, with single, apical ostiolum, 160 μ across; ostiola papillate, dark-bordered; perithecial wall pseudo-parenchymatous, not very thick, paler inside, increasingly dark outwards; mycelia surrounding perithecial wall dark-colored, mixing with colorless ones which predominate farthest from pycnidia; pycnospores mostly elliptic, frequently cylindric with blunt ends, or ovoid, septate at the middle, not constricted, 9–11 $\times$ 3.5–4 μ, walls colorless, protoplasm pale-greenish, usually not conspicuously granulate but rarely one-nucleate in each cell; pedicel colorless and hyaline, short.

On branches of *Morus alba*.

Type localities: Fukui-ken prefecture, Japan, March, 1909, K. Hara; Idu-no-kuni, Shidzuoka-ken, Japan, Apr., 1909, I. Miyake.

Illustrations: Two black and white lithographic figures showing pycnidium and pycnospores.

Ascochyta moricola Berl. differs from this species in having dark-colored fusoid pycnospores pointed at both ends, and constricted at the septum.

Note: As the name *Ascochyta mori* has already been used by R. Maire (Ann. Myc. **11**[4]: 354, Aug. 1913), I propose a new name, *Ascochyta Miyakei* for this species.

STAGNOSPORA MORI I. Miyake sp. nov. in Sangyô Shikenjô Hôkoku (Technical Report, Imperial Sericultural Experiment Station), Tôkyô, Japan. **1**[5]: 348, pl. 17, figs. 22, 23. T. 4, xii, Dec. 1916. Japanese.)

Pycnidia sub-epidermal, walls of thick pseudo-parenchymatous tissue, dark-brown, ellipsoid or globoid, erumpent with short papilliform openings, 130–160 $\times$ 120–150 μ; ostiola black and darker than the pycnidial wall; pycnospores cylindric, slightly curved, sometimes inequilateral, rounded at both ends, 3-septate, one septum formed earlier, more or less constricted, colorless, hyaline, granulate, germinating from either end or from both at the same time; 21–26 $\times$ 6–9 μ; pedicel short, small; paraphyses filiform, straight or slightly curved and twisted, the innermost the longest, shortening toward the opening.

Illustrations: Two black and white lithographic figures showing pycnidium and pycnospores.

On twigs of *Morus alba*.

Type locality: Yamagata-ken (prefecture) Yonezawa-shi, Mar. 1915, I. Miyake.

It is often observed that the fungus causes the host tissues to disintegrate and usually only bast fibers are left unattacked.

ROBILLARDA MORI I. Miyake sp. nov. in Sangyô Shikenjô Hôkoku (Technical Report of the Imperial Sericultural Experiment Station), 1^5: 346, pl. 17, fig. 19. T. 4, xii, Dec. 1916. (Japanese.)

Pycnidia hypo-epidermal, later erumpent with a single ostiolum, black, globoid or ellipsoid, 200 μ across; ostiola papillate, short and small; pycnospores cylindric, 15–18 $\times$ 2.5–3 μ; more or less thickened at the middle portion, slightly rounded at the base, and rather pointed at the apex, straight or slightly curved, colorless to pale-greenish, septate at the middle, not constricted, with 3–4 bristles at the end; bristles equal in length.

On dead branches of *Morus alba* (rare).

Type locality: Fukui-ken prefecture, Japan, March, 1909, K. Hara.

Differs from *R. Cavarae* Tognin, which has pycnospores with long pedicels measuring 40–50 μ; and from *R. Celtidis* Scalia, characterized by having paraphyses 40–45 μ long.

CYTODIPLOSPORA MORI I. Miyake, sp. nov. in Sangyô Shikenjô Hôkoku (Technical Report, Imperial Sericultural Experiment Station), Tôkyô, Japan. 1^5: 347, pl. 17, figs. 20–21. T. 5, xii, Dec. 1916. (Japanese.)

Stromata scattered or gregarious, black, hemispherically elevated above, then disclosed, rupturing the epidermis, ½–⅔ mm. in diam., round or ellipsoid, pseudo-parenchymatous; pycnidia 4–5, sometimes more than 10 in one stroma, globoid or ellipsoid, with short, flat ostiola; pycnidial wall made up of finely and densely fascicled hyphae, colorless inside; pycnospores colorless, hyaline or pale-greenish, guttulate, cylindric with round ends, ellipsoid or ovoid, even, sometimes irregular, straight or curved, uniseptate, septa centric or eccentric, constricted or not constricted, variable in size, 6–15 $\times$ 3–5 μ.

On living twigs of *Morus alba*.

Type locality: Tôkyô-fu (prefecture) Nakano-chô, May, 1915, I. Miyake.

Illustrations: Two black and white lithographic figures showing pycnidia and pycnospores.

Found nowhere else, parasitic; mycelium intercellular and with haustoria entering the host cells.

DIMEROSPORIUM MORI Y. Endô sp. nov. in Dainippon Sanshi Kwaishô (Journal of the Sericultural Association of Japan), **26**[303]: 300, fig. B on p. 288, Apr. 1, 1917. (Japanese.)

Perithecia large, ellipsoid, 110–120 μ high, 130–140 μ across, without appendages, dark-brown; perithecial wall consisting of large cells containing several oil globules in each cell; asci numerous, clavate, thin-walled, 60–70 $\times$ 12–15 μ, 8-spored; ascospores almost definitely biseriate, oblong, subacute at both ends, 7–8 $\times$ 5–7 μ, yellowish-brown, uniseptate, with 1–2 shining oil globules in each cell.

Epiphytic on leaves of *Morus alba* (mostly on variety *Nezumigaeshi*), occurring with a species of *Meliola*. Catenulate hyphae, unicellular microconidia, multicellular macroconidia, gemmae, spermogonia, and pycnidia were observed, but it was not determined to which species they belong.

Locality: Ueda, Chiisagata-gun, Nagano-ken, Japan, nursery ground of Ueda Sericultural College, and mulberry fields of Tokida section east of the college grounds.

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